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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 08038.0044-00000
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed name _____	Application Number 09/667,777 First Named Inventor Mitsuaki KOMINO Art Unit 1267	Filed September 22, 2000 Examiner R. Zervigon
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. <input checked="" type="checkbox"/> attorney or agent of record. Registration number 28,220 <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ </div> <div style="width: 45%; text-align: right;"> _____ <i>/David W. Hill/</i> Signature _____ David W. Hill Typed or printed name _____ (571) 203-2735 Telephone number _____ September 7, 2007 Date </div> </div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>		

☒ *Total of 1 forms are submitted.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Mitsuaki KOMINO et al.)
) Group Art Unit: 1763
Serial No.: 09/667,777)
) Examiner: R. Zervigon
Filed: September 22, 2000)
) Confirmation No.: 1267
For: ELECTRODE, SUSCEPTOR,)
PLASMA PROCESSING)
APPARATUS AND METHOD OF)
MAKING THE ELECTRODE AND)
THE SUSCEPTOR)

Mail Stop AF

VIA EFS-WEB

Commissioner for Patents
P.O. Box 1450
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Sir:

APPLICANT'S REMARKS FOR PRE-APPEAL BRIEF CONFERENCE

Applicant submits the following remarks concurrently with a Notice of Appeal, a petition for a two-month extension of time, and a request for a pre-appeal brief conference pursuant to the U.S. Patent Office pre-appeal brief conference procedures published in the July 12, 2005, Official Gazette Notice.

Claims 36, 38-40, and 42-44 are pending, of which claims 36 and 44 are independent. Independent claim 36 is directed to an electrode having a base metal, a heater, and a pair of core metal plates and recites, amongst other features, "the core metal plates being arranged above and below the heater, respectively" and "the heater and the core metal plates [] cast in the base metal such that the core metal plates are **entirely surrounded by the base metal and are entirely in metal-to-metal contact**

with the base metal...." Claim 36, ll. 6-9 (emphasis added). And independent claim 44, which is directed to a plasma processing apparatus includes, *inter alia*, "a processing vessel; the electrode as defined in claim 36; and a high frequency power source adapted to apply a high frequency voltage to the electrode."

In the final Office Action dated April 16, 2007, the Office rejected claims 26, 38-40, and 42-44 as being anticipated by Japanese Patent Application Publication No. JP 09-165681 ("Sagusa") in view of U.S. Patent No. 5,800,618 ("Niori"). As discussed below, the Office has, *inter alia*, (1) failed to demonstrate that Sagusa in view of Niori disclose or suggest a base metal arranged relative to the heater and core metal plates, (2) mischaracterized the term "cast", and (3) failed to demonstrate that the combination of Sagusa and Niori disclose or suggest the spatial arrangement of each core metal plate with respect to the heater. For at least these reasons, the pending rejections are improperly based.

First, Applicant respectfully urges that the Office has improperly equated the aluminum rolled stock covering in Sagusa with the "base metal," as recited in claim 36, in which the heater and the pair of core metal plates are embedded. But in Sagusa, no heater and pair of core metal plates are embedded within the aluminum rolled stock. Instead, a layer of aluminum rolled stock surrounds an aluminum cordierite complex. Specifically, referring to Drawing 1, "[t]he **circumference of the plate 12** of the aluminum cordierite complex which embedded the sheath heater 11 as the whole **is covered with the aluminum rolled stock 13**" Paragraph [0011] (emphasis added).

Assuming that the skilled artisan would combine the aluminum rolled stock of Sagusa with the device of Niori, the resulting structure would fail to satisfy each element

of independent claim 36. As the aluminum rolled stock is an exterior layer, or as described by Sagusa "a covering," that material cannot entirely surround any core metal plate contained within that interior structure. Even assuming that the core metal plates are positioned so that one face is exposed to the exterior covering, each surface of the plate could not be in contact with the aluminum rolled stock. Thus, the exterior rolled aluminum stock layer of Sagusa is physically incapable of entirely surrounding any core metal plates contained therein. As Niori was apparently only cited to allegedly disclose a core metal plate and electrode, it fails to remedy this deficient teaching of Sagusa.

Second, the Office continues to mischaracterize the term "cast" and improperly asserts that the rolled aluminum stock of Sagusa is a cast material. Notwithstanding that the rolled aluminum stock cannot be the base metal because Sagusa and Niori fail to teach that the rolled aluminum stock entirely surrounds a pair of core metal plates, the aluminum rolled stock cannot properly be considered a cast metal as required by claim 36.

The Examiner maintains that the broadest reasonable interpretation for the term "cast" is a dictionary definition- "to dispose or arrange into parts or into a suitable form or order." Office Action at page 3 (citing Merriam-Webster's Collegiate Dictionary, 10th ed. p. 178). But Applicant notes that an interpretation of a claim term cannot be considered reasonable when the specification is not taken into consideration. See MPEP §2111.

Applicant asserts that the Office's proffered definition has no apparent connection to the specification nor to an ordinary skilled artisan in the metallurgical arts. Indeed, the term "cast" is well-known in the field of metallurgical arts. Consistent with

the specification, the term “cast” generally refers to a product or process in which the product is formed by pouring or injecting, for instance, a liquid material in a mold to form a predetermined shape.

But the Office ignores both the specification and the meaning of the term within the metallurgical arts by continuing to improperly and unreasonably interpret the term “cast” as discussed above. This arbitrary dictionary definition is in no way consistent with the metallurgical technical meaning of the term “cast” and Applicant requests that the Office reconsider its interpretation. Thus, when the term “cast” is interpreted consistent with its use within the metallurgical arts, the rolled aluminum stock of Sagusa cannot properly be considered a base metal. It clearly is not formed by casting in a mold. Instead, as the term suggests, the aluminum stock is rolled to cover the Sagusa device. Thus, the combination of Sagusa and Niori fails to suggest a “base metal formed of a cast metal” and fails to render the pending claims obvious.

Finally, the Office improperly concludes that Niori suggests a multiplicity of metal plates, in this instance, a pair of core metal plates. The Office admits that Sagusa fails to teach the core metal plates and apparently relies on Niori to supposedly provide that suggestion. Niori, however, not only fails to disclose a pair of core metal plates, it fails to disclose the arrangement of each plate with respect to a heater.

Claim 36 provides for a specific arrangement of the plates with respect to the heater, wherein “ a pair of core metal plates embedded in the base metal and **arranged substantially parallel to the plane and adjacent to the heater**, the core metal plates being **arranged above and below** the heater, respectively;....” Claim 36, ll. 4-6. Sagusa in view of Niori fails to suggest any particular arrangement of the core metal

plates relative to the heater. Indeed, as Sagusa fails to mention any type of core metal plate, the Office would have to rely on Niori to remedy that shortcoming. But Niori falls short and fails to mention any teaching of locations of core metal plates. Consequently, the Office's assertion that Niori's teachings of a single plate implies a multiplicity of plates ignores other elements of claim 36, namely the spatial relationship between the two core metal plates and the heater. As each element must be disclosed or suggested in the applied references, the failure of Sagusa and Niori to teach or suggest that the core metal plates are "arranged above and below the heater" and "arranged substantially parallel to the plane [of the heater]" precludes them being cited as a basis for an obviousness rejection.

In view of the foregoing remarks, Applicant submits that claims 36, 38-40, and 42-44 are neither anticipated nor rendered obvious in view of the applied references. Applicant, therefore, requests reconsideration and the timely allowance of the pending claims. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: September 7, 2007

By: /David W. Hill/
David W. Hill
Reg. No. 28,220